

## REMARKS

Applicants appreciate the continued examination of the present application and the issuance of a new non-final Official Action. Applicants only regret that they had to file both a Pre-Appeal Brief Request for Review and an Appeal Brief in order to have the U.S. Patent and Trademark Office agree that the previous rejections were inappropriate. Nonetheless, in response to the newly issued rejections under 35 USC §103(a) in view of U.S. Patent 6,531,328 to Chen in further view of U.S. Patent Application Publication No. 2004/0041757 to Yang et al., and in order to advance the present application to allowance, the independent claims have been amended extensively to further clarify their patentability. Applicants respectfully submit that the pending claims are now in condition for allowance, for the reasons that will be described below.

### **Independent Claims 3 and 15 Are Patentable Over Chen in View of Yang et al.**

Independent Claim 3 has been amended by incorporating the recitations of dependent Claim 4 therein, and by canceling Claim 4. (Independent Claim 3 has also been amended to recite "the semiconductor light emitting device" in lines 4 and 8, to overcome the claim objections and without changing the scope of Claim 3.) Similarly, independent Claim 15 has been amended to incorporate the recitations of Claim 16 therein. Applicants respectfully submit that these claims are patentable over Chen in view of Yang et al. for the following reasons.

In particular, both of these claims now recite:

wherein the first and second spaced apart conductive traces extend from the cavity to the first face, around at least one side of the aluminum block and onto a second face of the aluminum block that is opposite the first face. (Emphasis added.)

In rejecting Claims 4 and 16, the Official Action states that Chen discloses the traces extending around at least one side of the aluminum block. However, Applicants respectfully submit that this is not the case. In particular, none of Figures 3-20 of Chen illustrate a conductive trace **16** extending around the side of the block **8**. More specifically, although Figures 3-9 of Chen appear to be cutaway section views, Figures 10(A), 10(B) and 13-20 clearly are complete sectional views of the finished product, and are clearly devoid of any conductive traces extending on the side of the block **8**.

Further proof of Chen's lack of teaching may be found as follows: If the conductive traces extended around the sides of the block in Chen, there would appear to be no need for the conductive vias in any of the embodiments of Figures 3-20 of Chen. Indeed, the conductive vias appear to have been provided in Chen to provide a conductive path to the back face of the block, and prove that Chen is devoid of any recognition that contact to the back face of the block may be made by going around the side of the block, as clearly recited in Claims 3 and 15 of the present application.

The Examiner is specifically referred to some embodiments of the present invention as illustrated in Figures 3A, 3B, 4 and 5 of the present invention, which clearly illustrate conductive traces extending around the side of the block. These embodiments should be compared with Figures 3-20 of Chen, which do not show conductive traces on the side and clearly show back face access using conductive vias. Nor does Yang et al. provide the missing teachings, because Yang et al. also includes conductive vias. For at least these reasons, Claims 3 and 15 are patentable over Chen in view of Yang et al. Dependent Claims 5, 11-14 and 17 are patentable at least per the patentability of the independent claims from which they depend.

**Independent Claims 9 and 18 Are Patentable Over Chen in View of Yang et al.**

Dependent Claims 9 and 18 have been rewritten in independent form by incorporating the recitations of independent Claims 3 and 15, as previously presented, therein. These claims have also been amended to clearly recite that the through holes extend from the first face outside the cavity to the second face, and that the corresponding conductive vias also extend from the first face outside the cavity to the second face. In sharp contrast, the embodiments of Chen that include conductive vias (Chen Figures 7-20) all include vias that extend from within the cavity to the second face. By providing vias that extend from the first face outside the cavity to the second face, simplified manufacturing may be provided by embodiments of Claims 9 and 18, because the via forming and filling processes do not need to reach into the cavities. For at least these reasons, Claims 9 and 18 are patentable. Dependent Claims 10, 20 and 29-32 are patentable at least as depending from a patentable independent claim.

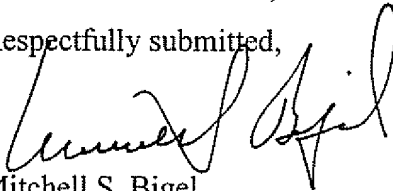
**New Claims 33-44 Are Patentable**

New Claims 33-44 correspond to pending Claims 3, 5, 9-14 and 29-32, except the recitations of a "solid aluminum" block and a conformal insulating coating "comprising aluminum oxide" have been eliminated, because the Official Action appears to view the use of aluminum/aluminum oxide in Yang et al., as opposed to silicon in Chen, to be obvious. These claims are patentable for the same reasons that are described above in connection with their analogous claims. For brevity, this analysis will not be repeated.

**Conclusion**

Applicants appreciate the continued detailed examination, notwithstanding the necessity to file a Pre-Appeal Brief Request for Review and an Appeal Brief. The claims have been extensively amended to advance the application to allowance. For the reasons described above, all of the pending claims are now in condition for allowance, which is respectfully requested.

Respectfully submitted,



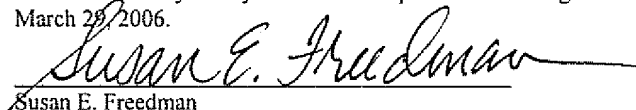
Mitchell S. Bigel  
Registration No. 29,614  
Attorney for Applicants

**Customer Number 20792**

Myers Bigel Sibley & Sajovec, P.A.  
P.O. Box 37428  
Raleigh, NC 27627  
919-854-1400  
919-854-1401 (Fax)

**CERTIFICATION OF TRANSMISSION  
UNDER 37 CFR § 1.8**

I hereby certify that this correspondence is being electronically transmitted to the U.S. Patent and Trademark Office on March 29, 2006.



Susan E. Freedman

Date of Signature: March 29, 2006